

KENWOOD

CASSETTE-RECEIVER

# KRC-3003 KRC-2003 KRC-1003

## INSTRUCTION MANUAL

KENWOOD CORPORATION

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**Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new cassette-receiver.**

### For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

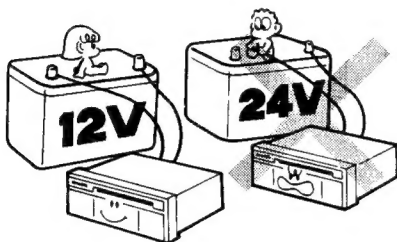
Model KRC-3003/2003/1003    Serial number \_\_\_\_\_

©PRINTED IN JAPAN B50-9372-00(K)(T)  
89/12 11 10 9 8 7 6

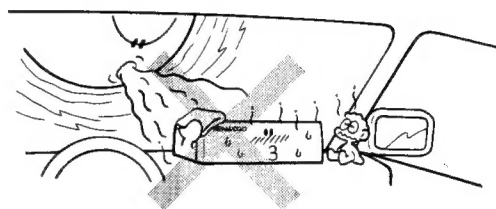
## **WARNING**

**TO PREVENT ELECTRIC SHOCK,  
FIRE AND OTHER INJURY.  
PLEASE NOTE THE FOLLOW-  
INGS:**

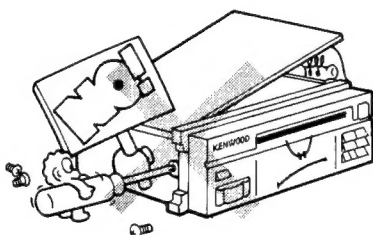
- The unit is designed to be connected 12 V DC and negative grounding.



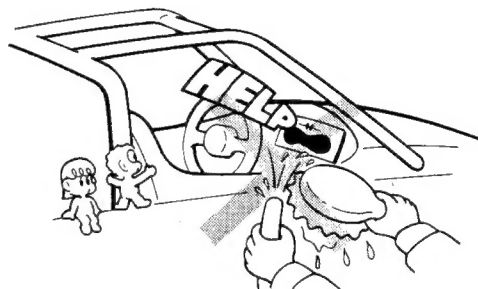
- Do not place the unit, where it will be exposed to direct sunlight or close to heating device.



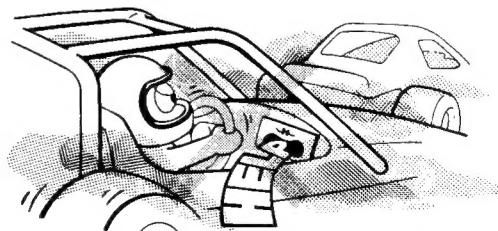
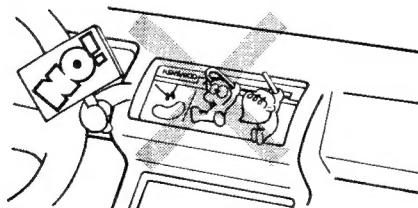
- Do not open enclosure, such as front panel, top or bottom cover.



- Do not dash water on the unit.



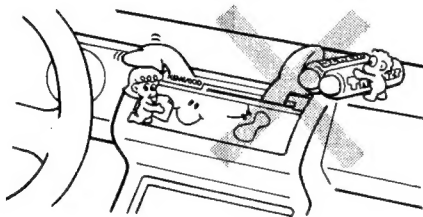
- Do not drop pieces of metal, needles, coins and other electrically conductive materials into the unit.



## NOTE

### CLEANING

1. Turn the power off, before cleaning the unit.
2. Do not use any type of abrasive pad, thinner, benzine and any such kind of objects.
3. Wipe the front panel and other exterior surfaces of the unit with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.



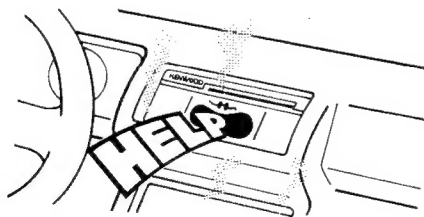
### NOTES ON HANDLING TAPE

- Before loading a cassette, check the tape for slack. If there is slack tape, remove it using a pencil to turn one of the spools in the cassette shell.
- Do not expose the cassette tape to direct sunlight. Leaving a cassette at high temperature or humidity can deform the cassette shell or tape.
- 120-minute tape is very thin. Avoid its use, because it can easily be twisted around the pinch roller.

### HEAD CLEANING

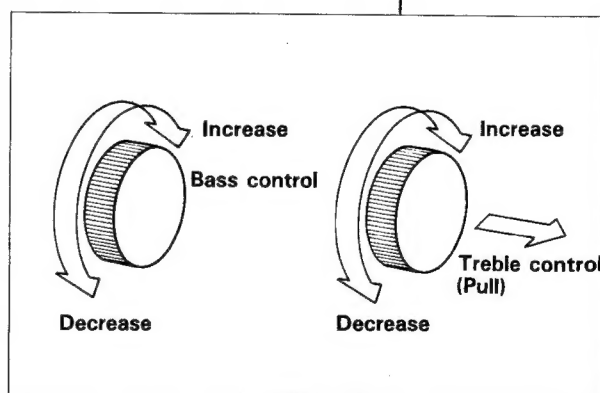
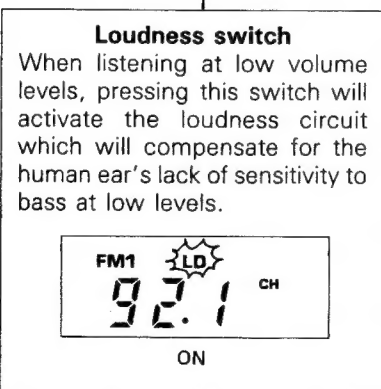
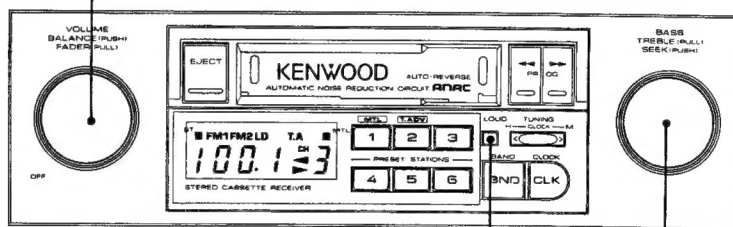
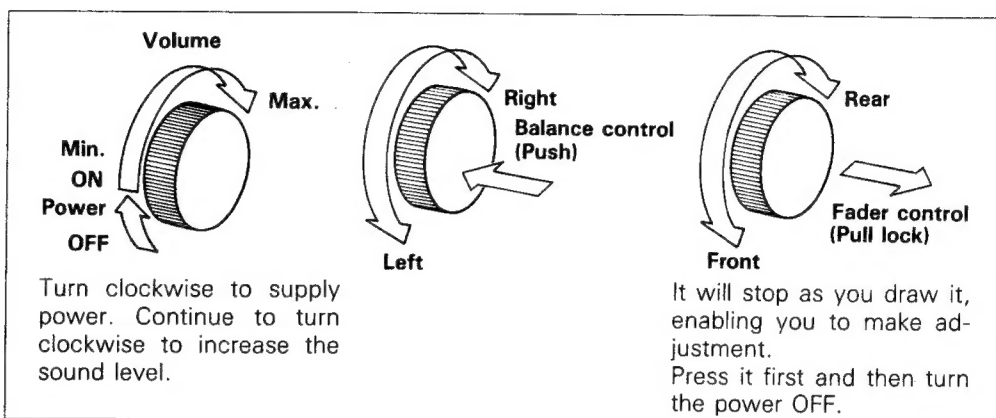
Magnetic particles from the tape adhere to the head surface after a long period of use, resulting in noise and poor quality sound. Clean the head with cleaning tape available at your KENWOOD dealer. And follow the directions with the head cleaner.

- If an abnormal smell or smoke is detected, immediately turn the power off.



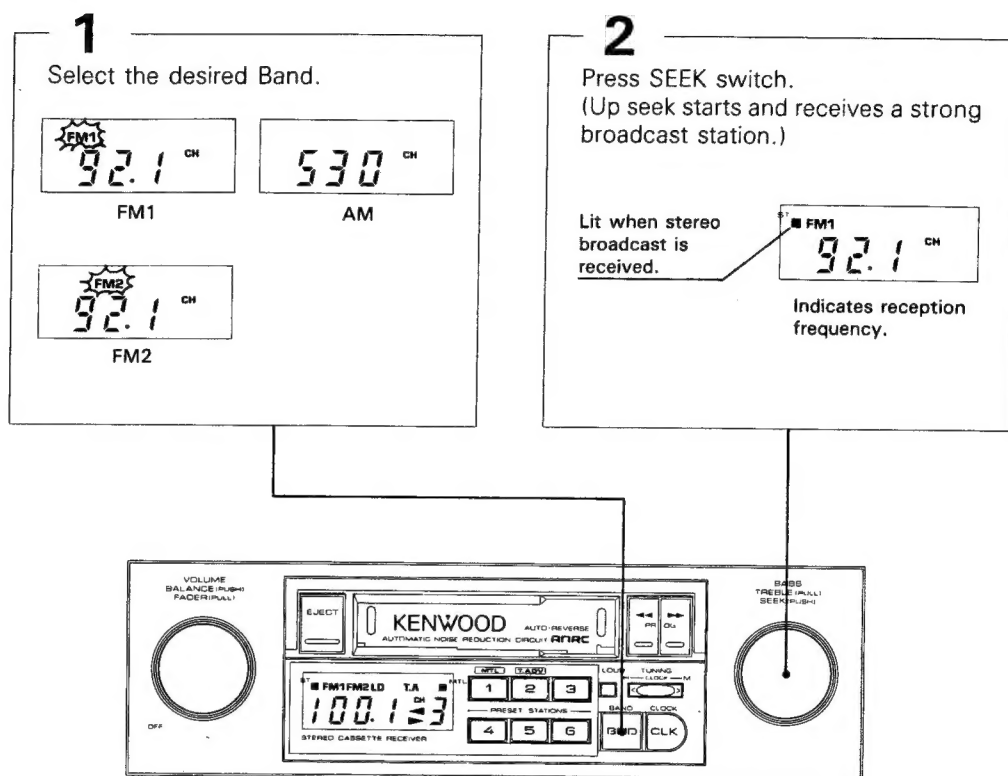
- If you have difficulty in installing the set in your car, please contact your KENWOOD dealer.

## SOUND LEVEL AND QUALITY



1. Turning the power ON automatically turns this unit to a tuner mode.
2. Explain how to operate hereafter with the power ON.

## SEEK TUNING



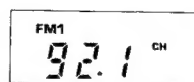
### ■ Channel space selection

The KRC-3003/2003/1003 has a channel space select function. Two spacing frequencies are available for both FM and AM; 200 kHz or 25 kHz for FM, and 10 kHz or 9 kHz for AM.

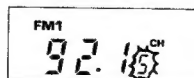
1. With the power off, press the "1" and the "5" Preset station switches simultaneously.
  2. Turn the power ON while holding both switches pressed.
  3. The channel spacing is changed to 25 kHz for FM and 9 kHz for AM. To return to the initial condition (200 kHz for FM and 10 kHz for AM), perform this operation once more.
- When the channel spacing is set to 25 kHz for FM, the last "50" is expressed by 50 in the display.

For example:

92.100 MHz



92.150 MHz

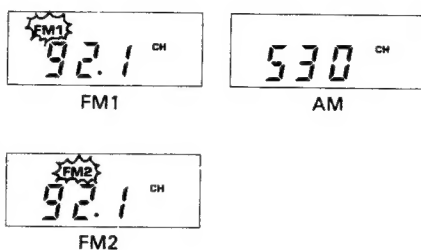


- When the channel space is changed, the memorized contents are stored.
- The channel space selection is not used in United States or Canada.

# MANUAL TUNING

**1**

Select the desired Band.

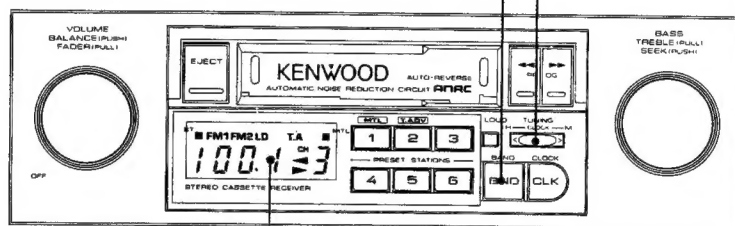


**2**

Press to select the desired frequency.



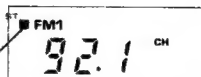
For lower frequencies      For higher frequencies  
(Continued pressing will change it continuously.)



**3**

Indicates the frequency being received.

Lit when stereo broadcast is received.



Indicates reception frequency.

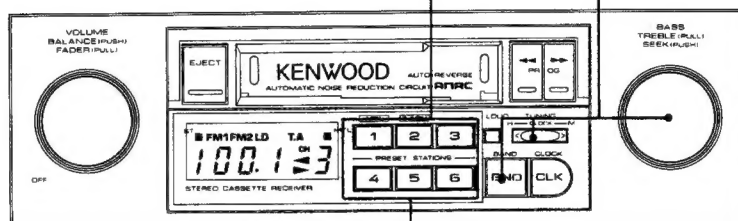
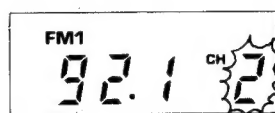
# PRESET STATION TUNING

**1**

Selects the band and station you wish to preset.

**2**

Press the preset station switch you wish to be kept preset for more than a second. (When it is preset, the number of switch pressed will be indicated.)

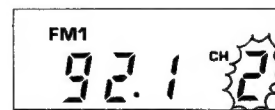


**3**

By repeating operation of 1 - 2 above, one station can be memorized in one switch each at FM1, FM2 and AM.

**4**

If tapped, the preset station can be called out. (The number of switch pressed will be indicated.)



- Changing the channel space will erase what was preset.

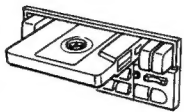
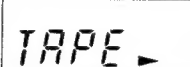


- If preset is to be made anew on the switch already preset, what was preset before will be replaced with what is to be preset.

# TAPE PLAYBACK

**1**

Insert the cassette tape.  
(Playback starts.)

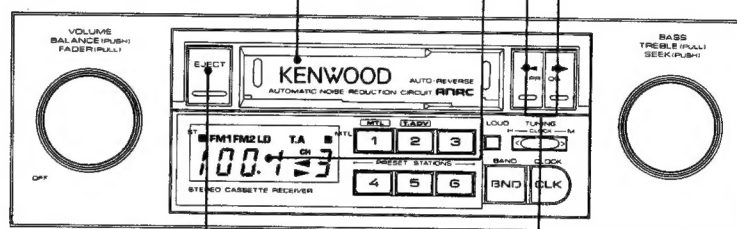



(During playback, *TAPE* will be indicated.)

**2**

Indicator	Operation	Press
▷	Fast forward	▷▷
▷	Rewind	◁◁
◁	Fast forward	◁◁
◁	Rewind	▷▷

To release, softly press the reverse switch.



**3**

When you wish to listen to the reverse side, press these at the same time.  
(The reverse side will be played back.)

**4**

Press this to stop the playback.  
(The cassette tape will come out.)

## < Playback side >

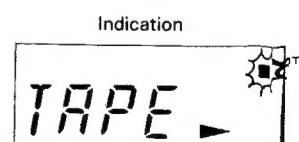
When inserted with the side A up

Indicator	Playback side
▷	Side A
◁	Side B

This will be reversed when inserted with the side B up.

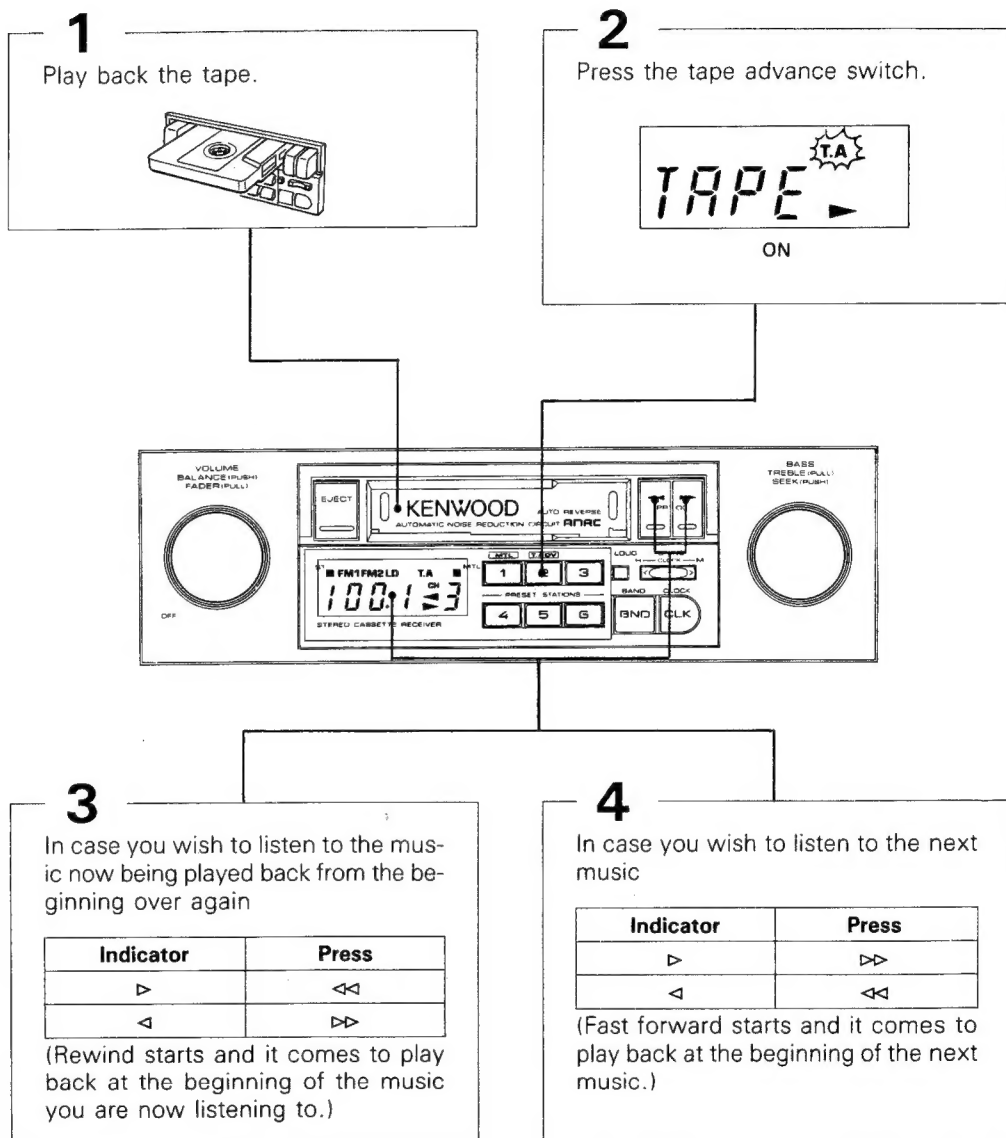
## < Other operation >

- Press the Metal switch to play back a CrO<sub>2</sub> or Metal tape.





## TAPE ADVANCE (Functions of the KRC-3003/2003.)



- Please note that in case of the following tapes, sometimes the tape advance does not function properly.
  1. When an interval between the music is less than 5 seconds.
  2. When a recorded portion of the low sound volume continues for more than 5 seconds.

# CLOCK INDICATION AND CLOCK ADJUSTMENT

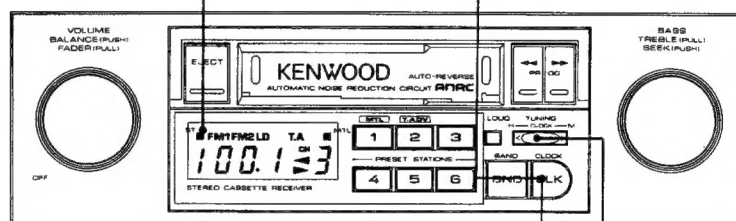
## ■ CLOCK INDICATION

Every time you press the clock switch, the following indication will appear.

Mode	Indication
Tuner mode	Reception frequency ↔ Clock
Tape mode	<i>TAPE</i> ↔ Clock



- If tuning operation is made with clock indication at tuner mode, it will come to indicate the frequency temporarily.



## ■ CLOCK ADJUSTMENT

1

Make it clock indication and then continue to press the clock switch.

2

While continuing the operation of 1 above, adjust "HOUR" at the H side and "MINUTE" at the M side.

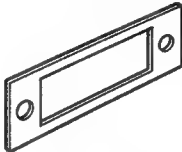













Press (HOUR) Press (MINUTE)

(Continued pressing will change it continuously.)

# ACCESSORY AND INSTALL MANNER

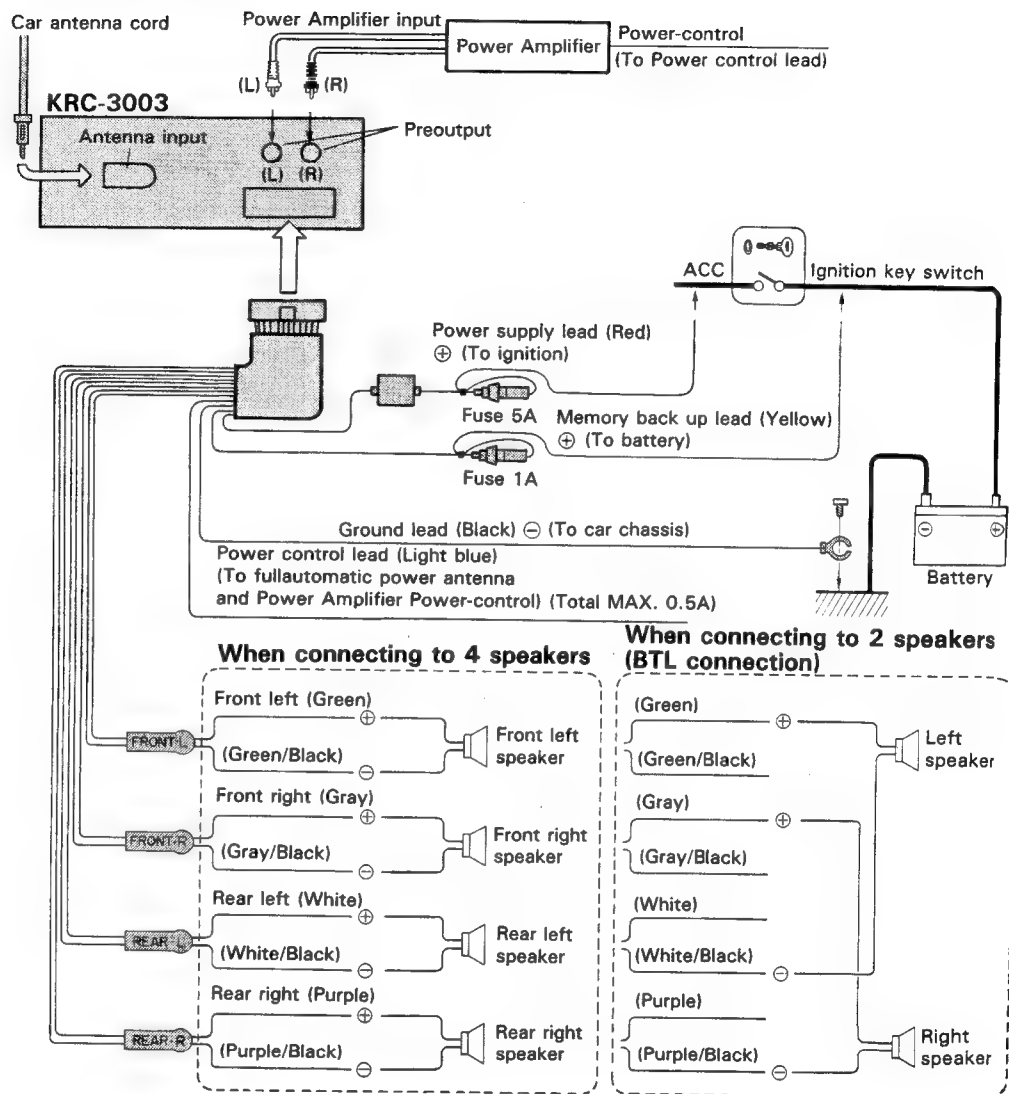
## ■ ACCESSORY

No.	Part name	External View	Number of units	No.	Part name	External View	Number of units
①	Trim Plate		1	⑥	Tapping screw (M5 × 16)		2
				⑦	Hex. Bolt (M5 × 20)		1
②	Control Knobs		2	⑧	Hex. Nuts (M10)		4
③	Metal Plate		2	⑨	Lock Washer (M5)		4
				⑩	Flat Washers (M5)		1
④	Metal Mounting Strap		1	⑪	Hex. Nuts (M5)		1
⑤	Sems Screw (M5 × 8)		1	⑫	Flat Washers (M10)		4

## ■ INSTALL MANNER

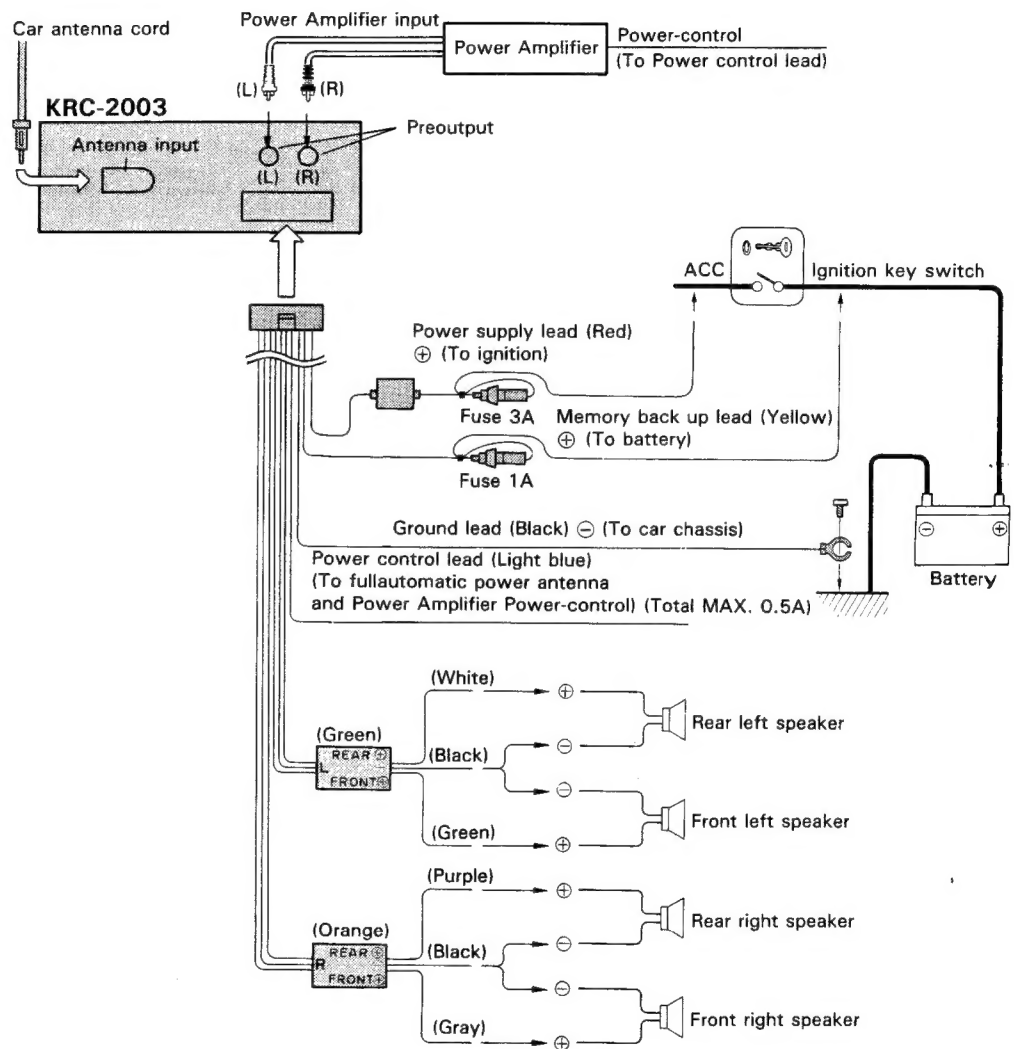
1. Before installation and wiring, remove the (–) terminal of the battery to prevent short-circuiting.
2. Connect the input and output cords of the system.
3. Connect the ground to the metal chassis of the car.
4. Connect the back-up power supply lead (yellow).
5. Connect the accessory power lead (red).
6. Install the set and after confirming the installation and wirings are correct, connect the (–) terminal of the battery.

## CONNECTIONS (KRC-3003)

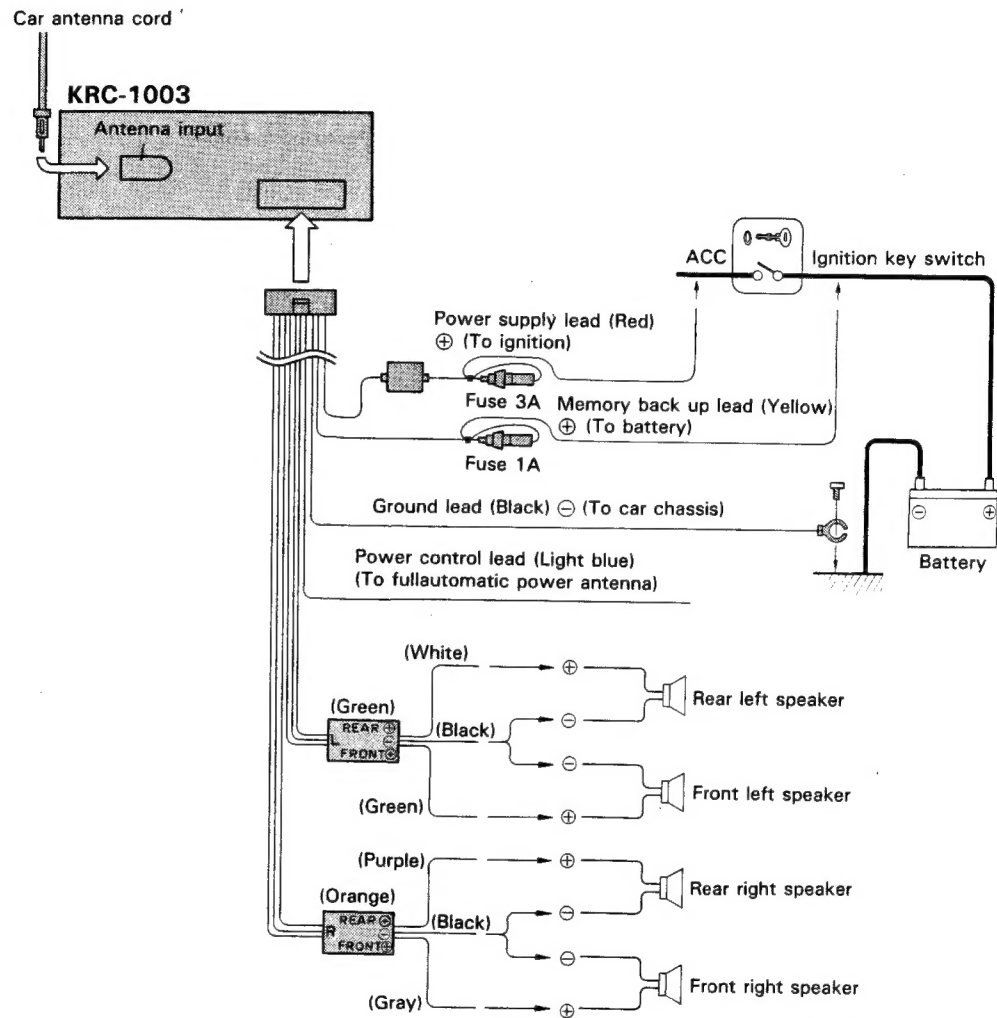


- As the unit uses BTL output, always connect the black stripe speaker wires to the ⊖ terminals of the speaker systems. Never let any speaker wires touch and never connect them to the chassis (ground). Do not let the speaker terminals come into contact with the chassis (ground). Insulate any unused output wire to prevent a short circuit.
- Secure unconnected wires properly so that they do not contact the vehicle chassis.
- If a fuse is blown, first check that the associated wires are not short-circuited, then replace the fuse with a new one having the same capacity.

# CONNECTIONS (KRC-2003)



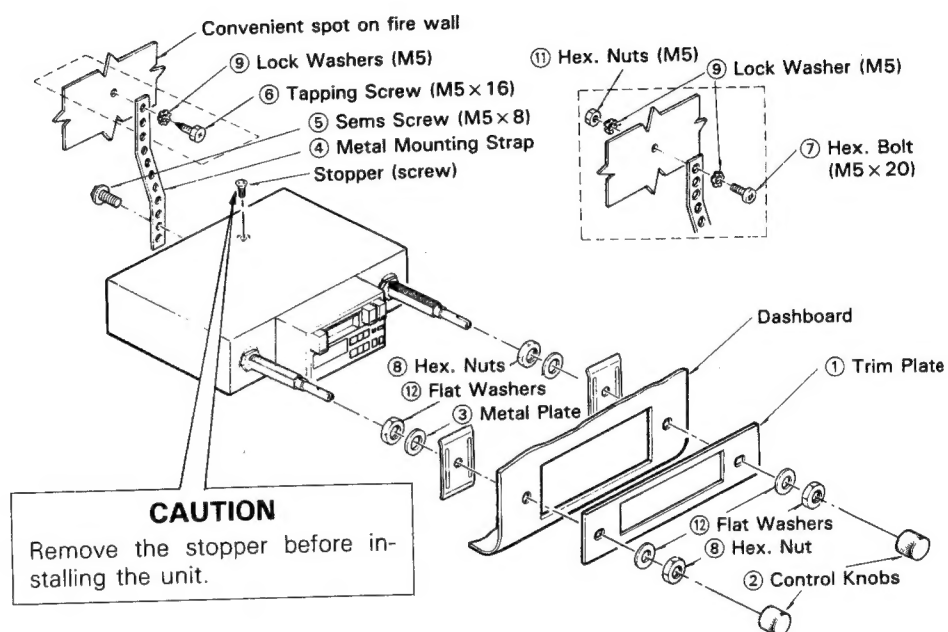
## CONNECTIONS (KRC-1003)



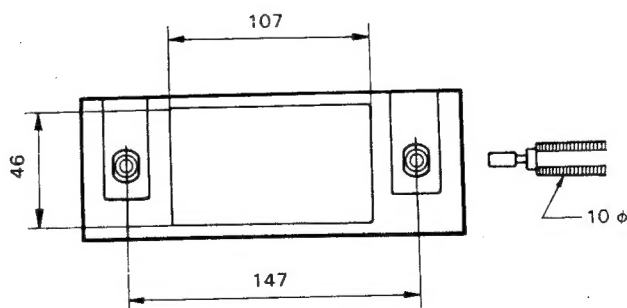
- Preout function is not provided on this unit.

# INSTALLATION

## <Example of installation>



- The distance between the right and left shafts is adjusted to 147 mm.



# TROUBLESHOOTING GUIDE

What often appears to be a malfunction is often due to user error in operation or connection. When trouble occurs with your unit, please check the following before calling for service.

Symptom	Possible cause	Remedy
No power	Blown fuse	Replace if blown with same rating.
No sound one channel	The balance/fade control is extremely rotated to one side.	Adjust the balance/fade control.
Poor reception	The antenna is not extended.	Extend the antenna.
Tonal quality is inferior.	Head is stained.	Carry out head cleaning.
Tape creaks.		

# SPECIFICATIONS

Specification subject to change without notice.

## FM TUNER SECTION

Frequency Range (200 kHz space)	87.9 MHz—107.9 MHz
(25 kHz space)	87.5 MHz—108.0 MHz
Usable Sensitivity	13.2 dBf (1.3 $\mu$ V/75 ohms)
50 dB Quieting Sensitivity	15.2 dBf (1.6 $\mu$ V/75 ohms)
Frequency Response	30 Hz—15 kHz $\pm$ 3 dB
Signal to Noise Ratio	70 dB
Selectivity	70 dB
Capture Ratio	2.0 dB
Image Response Ratio	67 dB
IF Response Ratio	120 dB
Stereo Separation (1 kHz)	38 dB

## AM TUNER SECTION

Frequency Range (10 kHz space)	530 kHz—1620 kHz
(9 kHz space)	531 kHz—1611 kHz
Usable Sensitivity (S/N 20 dB)	28 dB (30 $\mu$ V)

## CASSETTE DECK SECTION

Tape Speed	4.76 cm/sec.
Wow & Flutter	0.12% (WRMS)
Fast Winding Time	100 sec. (C-60)
Frequency Response	30 Hz—14 kHz $\pm$ 3 dB (120 $\mu$ s)
	30 Hz—16 kHz $\pm$ 3 dB (70 $\mu$ s)
Stereo Separation (1 kHz)	40 dB
Signal to Noise Ratio	54 dB

## AUDIO SECTION

[KRC-1003/2003]	
Maximum Output Power (1 kHz, 4 ohms)	6 W + 6 W
Rated Output Power (10% THD, 1 kHz, 4 ohms)	5 W + 5 W
(1% THD, 30 Hz—20 kHz, 4 ohms)	4 W + 4 W

[KRC-3003]	
Maximum Output Power (1 kHz, 4 ohms)	25 W + 25 W
Rated Output Power (10% THD, 1 kHz, 4 ohms)	20 W + 20 W
(1% THD, 30 Hz—20 kHz, 4 ohms)	15 W + 15 W

Tone Action Bass	100 Hz $\pm$ 10 dB
Treble	10 kHz $\pm$ 10 dB

## [KRC-2003/3003]

Preout Level/Load	1000 mV/10 kohms
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## GENERAL

Operating Voltage	14.4 V (11—16 V)
[KRC-1003/2003]	
Current Consumption	1.5 A at Rated Power
Installation size	180 $\times$ 50 $\times$ 130 mm (7-1/16 $\times$ 1-15/16 $\times$ 5-1/8 in.)
[KRC-3003]	
Current Consumption	5.3 A
Installation size	180 $\times$ 50 $\times$ 132 mm (7-1/16 $\times$ 1-15/16 $\times$ 5-3/16 in.)
Weight	1.3 kg (2.9 lb)